Title (en)
FLOW CONTROL PROTOCOL SYSTEM AND METHOD

Title (de)
FLUSSSTEUERUNGSPROTOKOLLSYSTEM UND VERFAHREN

Title (fr)
SYSTEME ET PROCEDE DE GESTION DU CONTROLE DE FLUX

Publication
EP 0823166 B1 20050119 (EN)

Application
EP 97907725 A 19970221

Priority
- US 9702664 W 19970221
- US 60391396 A 19960222

Abstract (en)
[origin: WO9731459A1] A system and method for controlling data transmission between two network elements. A first port of a transmitting element is coupled to a second port of a receiving element. The second port includes buffers for temporarily storing received data until the data can be sent to another element. Included in the transmitting element are a received-currently-full register (RCFR), a sent-and-not-received register (SANRR), and a buffer-busy register (BBR). The transmitting element checks its BBR to determine if a buffer in the receiving element is available. The availability of buffers can be determined using a single priority protocol or a multiple priority protocol. When data is received by the receiving element, it is sent to an available buffer. When the data is received by the buffer, the receiving element sets a bit in a currently-full register (CFR) and a bit in a next-message-to-send register (NMTSR). Each bit is associated with the buffer. Each bit in the CFR indicates whether the associated buffer is empty. Each bit in the NMTSR indicates the value of the CFR register at the time the previous control signal was transmitted with the exception that if the CFR is not empty at any time between control signals, i.e., buffer status messages, then the NMTSR is set and will not be reset even if the buffer is empty when the control signal is transmitted. The control signal can include only the NMTSR or both the NMTSR and the CFR. The control signal is transmitted on the same signal line as data that is being sent from the data receiving element to the data transmitting element. The data receiving element can multiplex the frames being sent in this direction with the control signal.

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CPC (source: EP US)
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